

From: [Young, Howard S.](#)
To: [Sheldrake, Sean](#); [Scott Coffey](#); [John Kern](#)
Cc: [Zhen, Davis](#); [Blischke, Eric](#); [Trump, Julee M.](#)
Subject: RE: Hard sediment refusal noted during oversight and best approach options to deal with this - Deliberative3
Date: Friday, April 20, 2018 6:57:40 AM

Sean and Davis,

Julee is on oversight this morning and will be at their tailgate HS meeting around 7:30 and communicate with the field crews and we can provide an email to you with the stop work and information needs if you like.

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From: Sheldrake, Sean <sheldrake.sean@epa.gov>

Sent: Friday, April 20, 2018 6:21 AM

To: Coffey, Scott <CoffeySE@cdmsmith.com>; John Kern <(b) (6)>

Cc: Zhen, Davis <Zhen.Davis@epa.gov>; Blischke, Eric <blischkee@cdmsmith.com>; Young, Howard S. <younghs@cdmsmith.com>; Trump, Julee M. <trumpjm@cdmsmith.com>

Subject: RE: Hard sediment refusal noted during oversight and best approach options to deal with this - Deliberative3

Based on the conversation I had with Cami, Chris, Sheryl, et al yesterday, the preference is a pause to get everything we need squared away now without waiting—ensuring relevant depth info is collected and any possible equipment changes (I still think a heavier instrument would be helpful) now. Chris was ok with the stop work to make sure we're getting the data we need. (fewest "thin" samples by exploring an equipment change now and relevant collection depths for everything collected to date to verify things are being done correctly)

S

Sean Sheldrake RPM, Unit Diver Officer

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<https://www.epa.gov/superfund/portland-harbor>

From: Coffey, Scott [<mailto:CoffeySE@cdmsmith.com>]

Sent: Thursday, April 19, 2018 5:54 PM

To: John Kern <(b) (6)>; Sheldrake, Sean <sheldrake.sean@epa.gov>

Cc: Zhen, Davis <Zhen.Davis@epa.gov>; Blischke, Eric <blischkee@cdmsmith.com>; Young, Howard S. <younghs@cdmsmith.com>; Trump, Julee M. <trumpjm@cdmsmith.com>

Subject: RE: Hard sediment refusal noted during oversight and best approach options to deal with this - Deliberative2

Thanks John!

We will digest all of your good information tonight and then I'll reach out to Sean and Davis for

direction tomorrow.

We do know they are collecting the relevant information you note as important in your email. Based on that, I think we might be in a good place to let them proceed with sampling (pending Sean and Davis input) as long as they continue careful note taking and provide EPA this relevant information in a timely manner (**like soon**) as opposed to waiting to give it to us at the end of their sampling effort. They certainly can put preliminary working draft on the information/maps.

Scott

From: John Kern <(b) (6)>

Sent: Thursday, April 19, 2018 5:27 PM

To: Sheldrake, Sean <sheldrake.sean@epa.gov>

Cc: Coffey, Scott <CoffeySE@cdmsmith.com>; Zhen, Davis <Zhen.Davis@epa.gov>; Blischke, Eric <blischkee@cdmsmith.com>; Young, Howard S. <younghs@cdmsmith.com>; Trump, Julee M. <trumpjm@cdmsmith.com>

Subject: Re: Hard sediment refusal noted during oversight and best approach options to deal with this - Deliberative2

We can work with any percentage as long as they keep track of locations where they recovered sediment at the primary location and where they tried alternate locations. The best option would be for them to collect and analyze "thin" samples from the primary location and also keep and analyze the "thicker" sample from locations where they found an acceptable alternate location. With careful book keeping we can generate unbiased estimates of the recoverable surface sediments. That said, recoverable is a function of device, so if we want to represent top 20 cm then we need a different device.

In a sane world we would analyze the results to see if concentration is sensitive to recovered interval. If so we would reoccupy low recovery locations with a different device. Core, Russian peat borer etc.

On Apr 19, 2018 7:26 PM, "Sheldrake, Sean" <sheldrake.sean@epa.gov> wrote:

Hi Scott, I'm still thinking #3, and definitely not accepting the 10cm grabs/reducing the acceptable depth.

Thank you.

S

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<https://www.facebook.com/EPADivers>

<https://www.epa.gov/superfund/portland-harbor>

From: Coffey, Scott [mailto:CoffeySE@cdmsmith.com]

Sent: Thursday, April 19, 2018 3:38 PM

To: Sheldrake, Sean <sheldrake.sean@epa.gov>; Zhen, Davis <Zhen.Davis@epa.gov>; John Kern <(b) (6)>

Cc: Blischke, Eric <blischkee@cdmsmith.com>; Young, Howard S. <younghs@cdmsmith.com>; Trump, Julee M. <trumpjm@cdmsmith.com>

Subject: Hard sediment refusal noted during oversight and best approach options to deal with this
- Deliberative

Importance: High

Davis, Sean and John:

Providing you an update to this.

Based on a review of our oversight field notes, the refusals of power grabs in harder sediment locations is **1 out of 6 sample locations (17%)**. Less than we thought as some of the refusals were noted as debris obstruction, not hard sediment. Keep in mind that we are only performing oversight 2 to 3 days out of 6 days per week in order to remain with our current scope/budget. The additional information from the Pre-RD Group, which we've asked for and should be coming soon will help (we hope) to determine what the true percentage of hard sediment refusal has been over the past 3 weeks.

John Kern: Asking you to help us define what percentage threshold (17, 20, 40, 60%.....) would prompt a change in getting a heavier/different sampling tool, or allowing the Pre-RD a reduced penetration depth. These options and a couple more are listed out as follows:

Currently, we see the following options for continuing the PH baseline random stratified sediment sampling.

1. Continue sampling as normal implementing the contingency moves from 25 to 50 feet after 3 failed unacceptable grabs in hard sediment and then moving to the Alternative 1 location after 3 failed grab attempts in the 50 foot radius and Alternative 2 location if needed. **We call this option (which is currently being implemented) Continue the hunt for softer material in the Primary Location and if not found, go to Alternative 2 location.**
2. Minimize the number of unacceptable grab samples and moves by reducing the minimum acceptance penetration depth from 20 cm to something less (e.g. 10 cm).
3. Switch to a different sampling device on all of the sampling vessels.
4. Implement sediment coring at locations that have one unacceptable grab due to dense sand.

If we are going to choose option 2, 3, 4 then we should proceed asap to minimize issues with equipment related biasing to the sample locations.

Scott Coffey, L.Hg.

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